ASTRONAUT BIOGRAPHY

National Aeronautics and Space Administration

Lyndon B. Johnson Space Center
Houston, Texas 77058

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Andrew J. Feustel

(Ph.D.) NASA Astronaut

Summary:
Andrew J. Feustel was selected by NASA in 2000. The Lake Orion, Michigan native has a Ph.D. in the Geological Sciences, specializing in Seismology, and is a veteran of two spaceflights. In 2009, Dr. Feustel served on STS-125. This mission launched on Atlantis and was the fifth and final mission to service the Hubble Space Telescope that improved the observatories capabilities through 2014. Dr. Feustel also served on STS-134, launching on Endeavour to deliver the Alpha Magnetic Spectrometer and an ExPress Logistics Carrier to the International Space Station. Dr. Feustel has logged more than 25 days in space with over 42 hours in spacewalks.

Personal Data:
Raised and educated in Lake Orion, Michigan. Married to the former Indira Devi Bhatnagar of Ontario. Dr. Feustel enjoys auto restoration, guitar, water and snow skiing and is a fan of automotive and morotcycle racing. His parents both live in Michigan, and his wife's parents reside in Ontario.

Education:
Graduated from Lake Orion High School, Michigan. Associate Science degree, Oakland Community College, Michigan. Bachelor of Science in Solid Earth Sciences, Purdue University. Master of Science in Geophysics, Purdue University. Ph.D. in Geological Sciences, specializing in Seismology, Queen's University, Kingston, Ontario, Canada, 1995.

Experience:
While attending Oakland Community College, Dr. Feustel worked as an auto mechanic at International Autoworks, Ltd., Farmington Hills, Michigan, restoring 1950's Jaguars. At Purdue University, he served as a Residence Hall Counselor for two years at Cary Quadrangle for the Purdue University Student Housing organization. His summers were spent working as a commercial and industrial glazier near his home in Michigan. During his Master's degree studies, Dr. Feustel worked as a Research Assistant and Teaching Assistant in the Earth and Atmospheric Sciences Department of Purdue University. His thesis investigated physical property measurements of rock specimens under elevated hydrostatic pressures simulating Earth's deep crustal environments. While at Purdue, he served for three years as Grand Prix Chairman and team Kart driver for Sigma Phi Epsilon Fraternity. In 1991, Dr. Feustel moved to Kingston, Ontario, Canada, to attend Queen's University, where he worked as a Graduate Research Assistant and Graduate Teaching Assistant. Feustel's Ph.D. thesis investigated seismic wave attenuation in underground mines and measurement techniques and applications to site characterization. For three years, he worked as a Geophysicist for the Engineering Seismology Group, Kingston, Ontario, Canada, installing and operating microseismic monitoring equipment in underground mines throughout Eastern Canada and the United States. In 1997, Dr. Feustel began working for the Exxon Mobil Exploration Company, Houston, Texas, as an Exploration Geophysicist, designing and providing operational oversight of land, marine and borehole seismic programs worldwide.

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NASA Experience:
Selected as an astronaut by NASA in July 2000, Dr. Feustel reported to the Johnson Space Center in August 2000. His training included five weeks of T-34 flight school at Naval Air Station VT-4, Pensacola, Florida. Following the completion of two years of evaluation, he was assigned technical duties in the Astronaut Office Space Shuttle and Space Station Branches. Dr. Feustel is qualified as a Space Shuttle and Space Station Robotic Arm Operator, CAPCOM, and Instructor Astronaut for EVA training at the Neutral Bouyancy Laboratory.

Dr. Feustel has participated in many of NASA's Astronaut Training activities including: Field Medical Training, Field Maintenance Training, NEEMO X in the Aquarius Habitat in Key Largo, Florida; CAVES in Sardinia, Italy; NOLS in Alaska and Mexico; Winter Survival Training with the Canadian Armed Forces in Valcartier, Quebec; Desert Rats in Flagstaff, Arizona; Geotechnical Studies, Dry Valleys, Antarctica; and Deepworker Submersible Pilot Training, Vancouver, British Columbia.

Dr. Feustel served on the crew of STS-125, the final space shuttle mission to the Hubble Space Telescope, and he also launched on Space Shuttle Endeavour's final mission to the International Space Station on STS-134.

Spaceflight Experience:
STS-125 Atlantis (May 11 to May 24, 2009). This was the fifth and final Hubble servicing mission. The 19-year-old telescope spent six days in the shuttle cargo bay undergoing an overhaul conducted by four spacewalkers over five daily spacewalks with the assistance of crewmates inside Atlantis. The spacewalkers overcame frozen bolts, stripped screws and stuck handrails. The refurbished Hubble Telescope then had four new or rejuvenated scientific instruments, new batteries, a new gyroscope and a new computer. In completing his first space mission, Feustel logged a total of 20 hours and 58 minutes in three of the five spacewalks. The STS-125 mission was accomplished in 12 days, 21 hours, 37 minutes and 09 seconds, traveling 5,276,000 miles in 197 Earth orbits.

STS-134 (ISS assembly flight ULF6) (May 16 to June 1, 2011). This was the penultimate mission of NASA's Space Shuttle Program. The mission marked the final flight of Space Shuttle Endeavour. This flight delivered the Alpha Magnetic Spectrometer, a state-of-the-art cosmic ray particle physics detector designed to examine fundamental issues about matter and the origin and structure of the universe, and an ExPRESS Logistics Carrier to the International Space Station. The STS-134 mission included four spacewalks and was completed in 15 days, 17 hours, 38 minutes and 23 seconds, traveling 6,510,221 miles in 248 Earth orbits, touching down at Kennedy Space Center on June 1, 2011. Feustel served as the lead space walker (EV1) and logged 21 hours and 20 minutes over three of the mission's four spacewalks.

Dr. Feustel is scheduled to fly to the International Space Station on the Soyuz 54 launch vehicle in March of 2018.

Awards/Honors:
Graduated Cum Laude, Oakland Community College, Michigan. Purdue University: C.J. Newby Scholarship Award; Ned Smith Field School Scholarship Award; Amoco Fellowship; Chevron Fellowship. Queen's University: Thesis Bursary Award, Deans Award, Graduate Award, McLaughlin Fellowship, Reinhardt Fellowship. Recipient of 2 NASA Distinguisehd Service Medals.

Organizations:
Society of Exploration Geophysicists; American Geophysical Union; Sigma Phi Epsilon, Indiana Alpha Chapter, Purdue University; Association of Space Explorers; BMW Car Club of America.